of cleansing those ever-acting foci of pestilence, cesspools, is, in London, 1*l.* to 1*l.* 10*s.* per annum, or from 5d. to 7½d. weekly; whilst it is stated that water companies could construct and maintain in repair an apparatus in the nature of a water-closet and house drains for the removal of all refuse and waste water, two points of incalculable advantage in sanatory respects, for a weekly charge of 2½d. to 3d. per house. Mr. Chadwick, in his admirable sanatory report, has shewn the great loss in other respects from a want of water, and he has rendered a great service to the community by demonstrating that all the manifold benefits which would spring from an ample supply of this prime necessary of life would each, and every one of them, be accompanied by a pecuniary gain."

Mr. Grainger urges, very properly, the necessity of extending scientific instruction to surveyors, builders, and others, with whom much of the details must rest. "When it is recollected that all persons charged with great public interests are expected to undergo a long and extended course of study; that the clergyman, the medical practitioner, and, now, even the lawyer, must submit to a rigid examination before they are permitted to undertake duties involving the well-being, the health, and the property of the community, I confess I do not see why another class of officers, to whose intelligence and zeal are committed interests not less momentous, should not also pass through a preparatory course of study, and have their knowledge tested by a proper examination. There is no art, scarcely even any business, in which an acquaintance with science is not necessary, or at all events advantageous; and we may remark, that it is quite possible for a person to be familiar with all the technicalities of bricks and mortar, and to know the contents of a cube of stone or wood, and yet to be ignorant of those important principles which are essential to an enlightened system of sanatory measures. There are scientific questions concerned in all the business of drainage, ventilation, and the supply of water; and thus a knowledge of hydraulics and other branches of physics, as well as of chemistry, becomes indispensable to an efficient surveyor."

QUESTION OF PATENTS,

AND PROPOSITION TO ASSOCIATE THEORY AND EXPERIENCE.

Sir,—I do not consider your columns should be used as a medium of compliments between those who may indulge in scribbling for them, but I am disposed for once to depart from this proposition by thanking Dr. Sutro for his kind notice of my article touching the occupation of newly-erected houses, and more especially for his sensible remark as to the tone "in which I should rejoice to see all scientific discussions carried on though interest or fame may be affected," that is, without asperity or overweening vanity. I avail myself of this quotation as opening the discussion of the question of patents, upon which I have perhaps peculiar views; and Dr. Sutro's frank admission that science and practice should walk as sisters, hand-in-hand, appears to afford a fair opportunity of discussing the point. With respect to improvements emanating from individuals tending to benefit and improve the condition of society, I hold our talents are entrusted to be diffused to the greatest extent upon the principles of reciprocity, as it is not given to the human mind each to grapple with every subject. This involves the right of patent, and I am not prepared to contend that an individual having bestowed vast labour, and, probably at great cost, produced that which materially adds to the comforts or elegancies of life should not, by such protection, be enabled to reap the fruits of his labour by fair protected remuneration: but by a parity of reasoning, the public offering this protection have a right to demand the greatest and most useful results by enforcing conditions not interfering with the admitted rights of this party. I would therefore suggest that a party having (as at present) registered a patent, before it be granted, a proposition should be submitted to a board constituted of accredited and scientific men, with power to suggest and insist upon such alterations and additions as should apparently make it more perfect and applicable to its proposed use. And that the party should then have it patented with these improvements, of course, greatly to his gain, as being thus accredited, and with saving of anxiety and further cost to the individual whose invention was not thus accredited as of benefit to the public. Dr. Sutro's remark—"that experience deserves greater appreciation in such cases than theory, and that nothing would be more dangerous than to sacrifice facts to speculation," implies that his mind is not imbued with the pedantry (and I use not the term offensively), that too frequently is an adjunct to science. We shall cheerfully accord to science the evidence of cause and effect, but then it has to be practically applied; let us therefore by free discussion, ascertain the probable result of any theory, the desirableness of which I will endeavour to illustrate thus:—In my youthful days when under mathematical discipline, it was accredited as proveable to demonstration, that the progression of a body could be correctly ascertained as to its velocity, taking into account certain data, viz.: impetus, resistance by friction, atmosphere, &c.; the formula adopted was proposed to prove the positive results upon the data, and thus universally *scientifically* accredited, until a practical question arose in regard to the form of carriages, &c., upon the Great Western Railway, having reference to these points. The course adopted was to call in Dr. Lardner and other *scientific* men to meet Mr. Brunel (whom we all recognize in the one as the other character), and *practical* men; the result of the inquiry being, as I am informed, that too much value had been attached to friction, and too little to the resistance of the caprices of the atmosphere. I hail your journal as the neutral ground between science and practice, for free communication, whereby much good might result if practical men would publicly give their theory and proposed mode of operative detail. The scientific man might be induced to reason upon certain ascertained facts controlling the proposed results, or as rendering them efficient. Par exemple: limiting the desperate long period of Dr. Sutro for the occupation of houses, might be appended to his proposal (upon ascertained principles) the all-important desideratum, proper and uncontrolled ventilation of rooms. Having devoted some attention to, and to some considerable extent using a mode for curing smoky chimnies, which has been adopted by several of my professional brethren (or I should rather say a mode of avoiding them in construction, thinking their existence has been a sad opprobrium to us), it has long been my intention to intrude my views upon your readers, waiting only for leisure to make a few diagrams. If my principle of creating currents be admitted, I then have a crotchet of connecting the ventilation of a room with the positive adjunct of a fire-place, never. I hold, to be omitted in even the garret of a fourth-rate house. Here then I want the aid of science: not professing to understand the principles of currents, the caprice with which they take their course, and the mode of displacing or associating with fouler atmosphere, a proposition made in ignorance of these facts may positively tend to counteract well recognized principles of nature, which it happens to be aside my habits or pursuits to understand. G. R.

NEW CHURCH, HUNTINGDON.

This church was commenced last week, on the site lately occupied by the theatre. It is to be built in the Norman style of architecture. The contract is taken by Mr. Howard, builder, of Newington Causeway, London. The amount of contract is about 3,000*l.* The size of nave, in clear of walls, is 55 by 27 feet: it is calculated to seat 800 persons, including gallery; the greater part of the seats are to be open benches, and free. The walls will be of brick, and dressings of doors and windows Caen stone. There are at present only two churches in the town, which will together seat about 1200 persons. The population of Huntingdon, according to the census in 1841, was 3,507,—thus shewing the great want of more church accommodation. This church is to be built at the sole expense of the Lady Olivia B. Sparrow. The architect is Mr. W. G. Habershon, of St. Neots.

RECEPTACLE FOR SEPULCHRAL MONUMENTS.

The notion of erecting a sort of "Campo Santo" at one of the entrances to Paris, which formed the subject of considerable interest some time since, has become now, according to the *Illustrated London News*, a matter of almost certainty. The glories of "Pere la Chaise," says a writer in that journal, will be thus considerably eclipsed. The cemetery is to be covered, after the models of those of Pisa, Verona, Bologna, &c., which are now imitated in several cities of Germany. The cemetery will become in a few years a species of temple consecrated to the dead, and ornamented with all that art can imagine to honour and perpetuate the memory of man. In the long vaulted galleries will be ranged sculptured tombs, as in the ancient charnels of the cemetery of the "Innocens;" in the superior stages, sepulchral chambers, destined for families, will be decorated with mural paintings. The grounds of this immense edifice will be planted with trees, shrubs, and flowers; the "Campo Santo," being covered, will thus afford shelter to statues, bassi relievi, inscriptions, cenotaphs, from the degradations that the hand of time, and above all those of man, have visited on monuments which have been exposed to all the violences of atmosphere, the insults of the profane, and the severest "ills that stone is heir to." It is principally in an art point of view that the foundation of such a covered cemetery is to be considered. It will afford to architects, to sculptors, to painters, an added opportunity for the exercise of their gifts; and there is no doubt, if fully carried out, it will ultimately become the most vast, the most curious, and the most magnificent museum in Europe. A similar scheme for London has been proposed by more than one person, and will doubtless be carried out here before long.

ABBOT'S LANGLEY CHURCH, HERTS.

This church, which is dedicated to St. Lawrence, consists of a nave, two side aisles, a chancel with a chapel on the south side, and a square embattled tower having a short spire of lead. The tower, nave, and chancel, are built chiefly of flint covered with plaster, with the exception of the chapel on the south side of the chancel, which is a very good specimen of stone and flint, disposed alternately in square compartments.

The clerestory wall of the nave is supported by Norman piers and arches of good execution and in a fine state of preservation; each of the capitals are of different design and handsomely sculptured. Upright pieces of timber which support the ends of the tie-beams rest upon grotesque heads serving as corbels, and are decidedly of Norman workmanship. The font is of good design, its age between the thirteenth and fourteenth centuries. The pulpit, which is situated at the extremity of the nave on the north side, has unfortunately been erected with less taste than bounty, and to a certain extent mars the *tout ensemble* of the interior.

The chancel is in the perpendicular style, and was wholly appropriated to the reception of monuments until latterly, when the present incumbent with a liberal hand restored that and other parts of the church to their original purpose—removing a handsome marble monument of Lord Chief Justice Raymond, that then completely filled up the space now occupied by the perpendicular window over the communion table, which window has been replaced and filled with richly-painted glass representing St. James, St. Peter, and St. John, in canopied niches. The floor of the chancel has been laid with encaustic tiles of good device; the numerous alterations and repairs have all been done at the expense of the vicar, the Rev. Mr. Gee. The church is now perfectly restored to its pristine form, the parishioners therefore owe for this reparation of their church a debt of gratitude to their minister, and may congratulate themselves that their church this time, at least, has escaped that destroyer of architectural remains, whitewash.

Amongst other circumstances worthy of record, this parish is famous in history for having given birth to Nicholas de Camera, commonly called Nicholas de Breakspear, the

For a comprehensive guide on PDF Compression and OCR visit our website